

Title (en)

Magnetic recording medium and process for producing same

Title (de)

Magnetisches Aufzeichnungsmedium und Verfahren zu seiner Herstellung

Title (fr)

Support d'enregistrement magnétique et procédé pour sa production

Publication

EP 0834872 A1 19980408 (EN)

Application

EP 97307857 A 19971001

Priority

JP 26423096 A 19961004

Abstract (en)

A magnetic recording medium having a substrate disc with microscopic bumps formed by focusing a laser beam, wherein spacings D between adjacent microscopic bumps in the circumferential direction of the disc are varied so that the formula " $1 \leq (D_{\max} - D_{\min})/D_{\text{avg}} \times 100 (\%) \leq 200$ " is satisfied, wherein D_{\max} , D_{\min} and D_{avg} are the maximum, minimum and average spacings, respectively, as determined by a method wherein 2.5% of the total number of spacings D, having the largest dimensions, and 2.5% of the total number of spacings D, having the smallest dimensions, are excluded; and D_{\max} , D_{\min} and D_{avg} are measured on the remaining 95% of the total number of spacings D. The bump spacing variation is attained, for example, by modulating the pulse repetition frequency F of laser beam so that the ratio of " $(F_{\max} - F_{\min})/F_{\text{avg}}$ " is maintained in the range of 0.01 to 100, wherein F_{\max} , F_{\min} and F_{avg} are the maximum, minimum and average values, respectively, of the F of laser beam.

IPC 1-7

G11B 5/84; **G11B 5/64**

IPC 8 full level

G11B 5/73 (2006.01); **G11B 5/84** (2006.01)

CPC (source: EP KR US)

G11B 5/23 (2013.01 - KR); **G11B 5/255** (2013.01 - KR); **G11B 5/7377** (2019.04 - KR); **G11B 5/73913** (2019.04 - EP); **G11B 5/73919** (2019.04 - EP); **G11B 5/84** (2013.01 - KR); **G11B 5/8404** (2013.01 - EP US); **G11B 2220/2516** (2013.01 - KR); **Y10S 425/81** (2013.01 - EP US)

Citation (search report)

- [A] DE 19524220 A1 19960111 - MITSUBISHI CHEM CORP [JP]
- [AD] EP 0447025 A1 19910918 - SEAGATE TECHNOLOGY [KY]
- [A] DATABASE WPI Week 9250, Derwent World Patents Index; AN 92410070, XP002048192

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Designated contracting state (EPC)

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EP 0834872 A1 19980408; KR 100294828 B1 20010712; KR 19980032547 A 19980725; MY 119299 A 20050430; SG 71050 A1 20000321; US 5973894 A 19991026; US 6132651 A 20001017

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